



Electronic Temperature Control Systems

SINGLE STAGE COLD ROOM PANEL

GE-VCPL

Applicable to model numbers: 2051/52/53/54/55/56

DESCRIPTION

The VCPL series is especially designed for use in the commercial refrigeration and is available in various different models. The VCPL is also available with communication properties.

In addition to extremely accurate temperature control the VCPL offers the user diagnostics, marketing information and current statistics scroll i.e. average temperature, lowest temperature, highest temperature, number of door openings, compressor cycles and compressor running hours.

As standard all models in the VCPL series are fitted with 6 relays switching : compressor, heating element or solenoid valve, external alarm, evaporator fan, on/off switch and light(s). All relays in this unit have a switching capacity of 16 Amp. @ 240 Volt.

WARNING

This manual is part of the product and should be kept near the instrument for quick reference.

The instrument should not be used for purposes other than described and/or specified by the manufacturer. These controls can only be used with GE double insulated sensors.

SAFETY PRECAUTIONS

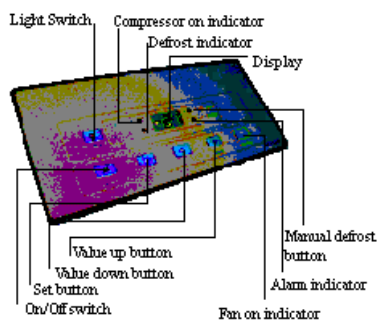
Ensure that the supply voltage is correct before connecting the instrument. (240 Volt)

Ensure that the instrument is not exposed to water or any other liquid.

Ensure that the current that is switched does not exceed the maximum switching capacity of the instrument. If the current to be switched is greater than the limits, a separate relay should be installed.

Ensure that all wires are properly connected in the appropriate terminal, a loose wire could cause sparking and damage the instrument and may be dangerous.

BUTTON COMMANDS



TO SET THE TEMPERATURE

In case of an instrument failure or faulty functioning of the instrument, return it to your local distributor or direct to the manufacturer. If the unit is still in its warranty period it will be replaced free of charge.

To set the temperature push the 'temperature set button' and the display will intermittently show the letters SP (set point) and the pre-set temperature. To increase the temperature use the value up button (▲), to decrease the temperature use the value down button (▼).

Once the required temperature is selected, release the buttons and wait until the display shows the actual temperature again. The instrument has now adopted the new setting and will operate in accordance with these new instructions.

ACTIVATE A MANUAL DEFROST CYCLE

It may be possible that from time to time the user wants to use some extra defrost cycle(s). To activate a manual defrost, push the manual defrost button and keep it pressed for a minimum of 5 sec. Until the defrost signal shows on the display.

A manual defrost may be activated as many times as required.

WARNING SIGNALS

In addition to its standard control functions, the GE-VCPL series also contains a number of diagnostic functions and can show the following alarm signals: RSF – There is a refrigeration system failure. Contact your supplier.

EE – There is a microprocessor (electronic) failure, contact your supplier.

PF1 – There is a sensor failure that is very likely caused by a loose connection of the sensor wire in the terminal block of the instrument. This sensor is the appliance sensor. Contact your local supplier.

PF2 – There is a sensor failure (as PF1), but in the sensor of the evaporator.

PF3 – As PF1 and PF2 but this is the sensor connected to the condenser

AL1 – The temperature of the appliance has exceeded its maximum allowable temperature.

AL2 – The temperature of the appliance has exceeded the minimum allowable temperature.

HT – The condenser is blocked

CHANGING PARAMETER VALUES

To change the parameter values switch the power to the unit off, push the temperature set button and keep it pushed whilst switching the power on again. The display will flash and intermittently show the figures 888. Once the display stops flashing, the instrument is in parameter mode and the values can now be changed.

To scroll through the parameters push the temperature set button and to change the value of the parameters use the 'value' buttons.

When finished, release all buttons and wait until the display shows the actual temperature again.

Please note that the VCPL has two different sets of parameters. The first batch can be accessed as described above and the second set can be accessed by holding the set button and the up button pushed together.

WARNING

If the power to the unit is switched off whilst the instrument is still in parameter mode, the system will NOT accept the changes.

MAINTENANCE

The GE-VCPL does NOT require any maintenance.

WARNING

To clean the fascia of the GE-VCPL use wet soapy rag.

The instrument is an electronic device, do not use water or any other cleaning liquid to clean the fascia of the instrument as this may cause serious and unnecessary damage to the system and may be dangerous.

WIRING INSTRUCTIONS

All wiring instructions are printed on the housing of the unit and contain all possible information needed to connect the GE-VCPL

Follow these instructions and ensure that all connections in the terminals of the instrument are properly fastened as loose connections may influence the performance of the instrument and may cause sparking.

The GE-VCPL is powered by 240 Volt and should be connected direct to the mains.

IMPORTANT

Only authorised and competent personnel should connect and/or disconnect the GE-VCPL.

INSTALLATION

The recommended hole size for the GE-VCPL is 9 5/32" x 3 5/8" but in addition there are the holes for the fasteners as per the drawing on the reverse of this instruction manual.

PARAMETER LISTING

Access through set button:

Param.	Description	Range
US	Upper SP limit	-40/212°F
LS	Lower SP limit	-40/212°F
DIF	Differential	1.8/178°F
CA1	Sensor 1 calibr.	±17.8°F
CA2	Sensor 2 calibr.	±17.8°F
D1	Display stability	1 to 8
D2	Display speed	1 to 255
rt	Min. rest time	1 to 30 min
dE	Defrost intervals	1 to 199 hrs
dd	Defrost duration	1 to 199 min
dF	Defrost method	1 = off 2 = heater 3 = hot gas
dt	Max temp. in appliance during defrost	-40/212°F
SP2	Max. evap. Temp. during defrost	-40/212°F
FP	Fan stop during defrost	0 = no 1 = yes
Fd	Fan delay to on	0 – 60 min.
CT	Refr. System failure elapse time	1 to 255 hrs
dEF	Display during defrost	0 = temp. 1 = start temp. 2 = dEF
LL	Low alarm temp.	-40/212°F
HL	High temp. alarm	-40/212°F
AD	Alarm delay	0 – 255 min.
B1	Buzzer off for	0 to 255 min
B2	Buzzer on for	0 – 255 min

Access through set and up button

Ht	Blocked condenser temp.	176 to 250°F
St	Time zone for reset	1 to 255 hrs
CF	Degr C or F	0 = C 1 = F
db	Display brightness	0 = bright 1 = dim
C1	Computer interface	0 = wireless 1 = Infra Red
D1	Data intervals	1 – 255 minutes
FL	Compressor run after failure	0 = yes 1 = no



cURus Approval Pending

GE Electronic Temperature Control Systems should not be exposed to low temperatures or high humidity, such as outdoor or refrigerated environments. It is the customer's responsibility to determine the proper application of the controls and to specify the optional Conformal Coating if the controls are going to be used in these environments.